

The theses of the doctoral (Ph.D.) dissertation

## **The special features of the accounting and financing of the silviculture**

Written by:

Pál Benkő

West Hungarian University



Faculty of Forestry



Gyula Róth Doctoral School of the Sciences  
for the Silviculture and Wild-management

Leader of the school: Dr. Károly Mészáros – university professor

Doctoral program for the management of the forest property

Scientific leader: Dr. Károly Mészáros – university professor

Scientific supervisor: Dr. Béla Lett – university professor

## ***Introduction***

The producing systems of the raw materials in the agricultural branch have enjoyed a relative protection owing to the increased intervention of the state everywhere in the world. Seeing the results of the United States of America, of the International Monetary Fund and of the World Bank, a new multilateral world trade system free of any differentiation and obstacles, and the possibility of establishing an organisation connected with this system have been outlined. The implementation of the programs of the World Trade Organisation (WTO) referring to the agricultural branch has been rendered and renders more difficult, as a consequence of the existing differences between the agricultural systems operated in the USA, in the European Union or in the developing countries, which are to be surmounted only with difficulty.

The most essential difference between the agriculture of the European Union and that of the United States of America is that the agriculture of the USA is more essentially divided, than that of the European Union and the USA declare the dominance of the individual and family farms. According to the principle we can find numerous small and medium sized farms, which can enjoy an inner and subvention and an export subvention as well, but the majority of them cannot live exclusively on the agricultural activity. About 70% of the agricultural production in America is produced by 8% of the farms. Despite the above mentioned the agricultural sector represented also an important power at the turn of the century, which can be achieved through the continuous increase of the organisation and through the concentration of the branch concerned, in addition to the efficient utilisation of the agricultural resources.

In Central and Eastern Europe, as well as in Central Asia the structure of the rural areas has had differences since the second half of the eighties, but there has been an essential transformation during this period. The most important transformations have occurred there, where the countries have striven after the development of an agriculture based mainly on the private ownership, operated on the basis of the market economy. The characteristic feature of the European agricultural model is that an important proportion of the

farms having small or medium sizes can live on the agricultural activity. The provision of the viability of the smaller family farms and thereby the keeping up of the European agricultural model could be and can be assured through a high level of agricultural subventions assured by the European agricultural policy. The reforms introduced till the turn of the millennium effected first of all the form of the subvention as a consequence of the characteristics of the model, whilst the high level of the subvention has remained essentially unchanged. The experiences gathered in the Central European region have shown that the transformation of the agriculture has been realised in the framework of importantly complicated and more complex processes in contrast with the previous expectations, and this process cannot be considered a finished process with the privatisation of the arable land or with the change of the capital-structure of the producing units. In the XXI century the development of the operational institute-system will be an element of high priority for the structural change, which has progressed eventually in the slowest manner in the whole region out of the various reform processes.

A very long-lasting, peaceful transformation process was started in 1989 in Hungary. The pointed out aim of the political and economic change of regime was the transformation of the former planned economy based on the collective ownership into the market economy, based mainly on the private ownership, making the juridical regulation market-conform, and the alleviation and the management of the social and economic burdens presenting themselves in the course of the switching over process. Owing to the bad allocation mechanism of the previous centrally planned economy, the gross foreign debt of the country was about 21.3 billion USD in 1990, the solvency became from time to time questionable, but the basic supply with food of Hungary did not become critical. At that time the operational structure of the agricultural production was characterised by the overweight of the large scale units in our country. With the accomplishment of the privatisation and the compensation laws a new land-structure was established. The state farms and the agricultural co-operatives have been eliminated partially, and

partially they have been transformed into economic associations, or new type co-operatives, leaving the right for the members to remain the member of the new organisation or leaving the former co-operation the possibility of establishing a private farm. The changes have transformed first of all the former unity of the landed property, forming the basis of the economic systems and the character of the leasehold. While the focus of the production was transferred to the private farms, the farmers should fight with the difficulties of the resumption, in addition to the decreasing incomes and profitability. The natural and economic indicators showed a falling tendency in every section and branch of the agricultural production during the decade following the change of regime. The lagging answers given to the new challenges, the model-crisis originating from the protraction of formulation of the policy related to the landed property, the lack of the willingness for the co-operation and integration, as well as the weakening of the state commitment have also contributed to this phenomenon to a great extent. After taking into consideration all those factors it can be stated that a disproportionately small income has been formed in the agriculture in comparison with the existing possibilities, and the branch has contributed only with a value of a little less than 5% to the GDP of the national economy. At the same time the propagation of the farming lease system has also contributed to the gradual concentration of the agricultural production in Hungary, and to the increase of the number of the farms having viable sizes.

In the meantime important changes have occurred in the field of the silviculture as well. The legal framework of the silviculture and of the related branches were elaborated and passed. After the allocation of property of the former co-operative forests or the initiation of a part of the state owned woodlands into the compensation system, the private silviculture has appeared once again. The state owned forestry have been transformed into joint stock companies and thereby their operating form and operating system has been essentially changed.

As a consequence of the enlargement of the European Union at several levels Hungary became the member of community and the member of the agricultural model of the EU on the 1. May 2004. In

spite of all the difficulties experienced during the change this meant a chance for the country as well. This was a chance for the forestry, according to which a broader circle of the people shall become interested in the maintenance of the sustainable silviculture with the aid of the creation of the forest property based on the tradition, corresponding to the social expectation in addition to some thousands of specialists. The society of the foresters made mainly steps at local level towards the class of the forest owners, but they could not or didn't want to show this to the broader public.

### ***The review of the problem***

The forest is a symbiosis developed from ligneous plants, species of tree and from the associated creatures. The forest is a sort of cultivation section, which determines the possibilities of the farming for years or for a generation.

The forest consists of a forest soil and of species, the characteristic of which is that they grow naturally and in value as well. The accounting and settling rules being in force at the turn of the millennium in Hungary rendered the visualisation of the value of property of the forest only to a very limited extent possible, though the change in the effective value of the forests could be from time to time very important as a consequence of the character of the silviculture. Under the framework of the silviculture having characteristically interest in property in the field of the market economy and of the general forestry relations prevailing in Hungary, the presentation and the settling of the changes occurring in the forest property have appeared as an expectation. Together with this the determination of the accounting data assuring the unanimous relation and of the indicators showing the identification in natural figures and in value is also necessary.

The forest is a complex ecological system and at the same time is a very complicated system serving for the settlement of accounts. The silviculture forms a part of the agriculture, and the agriculture is an important element of the national economy. The Hungarian national economy should fit in the political, institutional, division of labour,

productive, supporting and settling system, which is represented by the European Union. The place and the role of the Hungarian silviculture shall be found in this system based on each other and its goals shall be determined and the accounting and settling models assuring the transparency and the comparison supporting the very high professional expectations shall be also developed.

### ***Methodology***

I have investigated the broader economic environment of the agriculture in the doctoral dissertation through the processing of the international and domestic literary sources and through the investigation of the time series of the data and with multinomial analyses, further through the investigation of its legislative environment.

I have presented the changing organisational system of the Hungarian silviculture and the factors having an influence on it, its ownership-composition and its possessive relations, the institutions of the section concerned, its social organisations and their connections, as well as the decision system of the section.

In addition to the investigation of the tools serving for the economic regulation I have investigated the new models introduced in the European Union in the framework of the taxation and accounting regulations, the reform processes parallel to the enlargement of the European Union, and the procedures, which can be also introduced in our country following the changes.

Together with the determination of the European book keeping, accounting system and of the elements of the forest property I have presented the empirical examination used for the analysis of the peculiarities of the acquaintance and taxation of the domestic silviculture as well. I have investigated the effects of the special elements of the silviculture, among others of the immaterial protection and social services of the forests exerted on the yields and expenditures on the forest property. I have modelled the effects of the costs and yields exerted on the accounting value of the forest

originated from the economical and ecological approaches, as well as the accounting and settling possibilities of those elements.

Through the detailed analysis of the balance and operating statement of the silviculture sector in 2003 I have described the characteristics of the financial, income, and property positions of the state and private silviculture and I have revealed the characteristics of the forest settling and taxation.

Comparing the organisational, operating and settling models of the silviculture at the branch level, as well as taking the changes occurring in the settling and taxation systems of the European agricultural sector into account I have analysed the possible directions of the changes to be expected in the domestic silviculture, and I have accentuated the possible future visions of the settling models through the modern organisational and farming forms.

### ***The assumptions formulated in the doctoral dissertation***

The organisational systems, accounting, book keeping, taxation and subvention settling models generally accepted in the agricultural sector can be utilised accepting more or less compromises in the field of the silviculture, too. Accordingly the silviculture can be considered as an important part of the agriculture, but as a consequence of the complexity and feature of its organisational, managing and settling systems it can be considered as an independent branch, too. Through the presentation of the various systems and with their thematic comparison the characteristics can be determined, which are typical exclusively or first of all for the silviculture sector. Among the Member States of the European Union there are differences both in the natural and in the regulating environment, for which immediately acceptable and utilisable models cannot be found in Hungary according to the silviculture environment. Originating from the conditions, character, professional traditions and practice the Hungarian silviculture has further characteristic national features, on the basis of which this can be fitted only with difficulty, or with the aid of several regulating elements in the various economic and national economic systems. The goal formulated on the basis of the

assumption is the determination of the national characteristics and the presentation of the Hungarian silviculture at the level of a system.

The comparison of the broader and more narrow environment of the silviculture at international and national level has also rendered the presentation of the differences between the systems, as well as of the presentation of the characteristics of the various settling and accounting systems possible. In the course of the further analysis of the Hungarian silviculture system the important differences prevailing in the organisational structure of the silviculture or the differences to be found in the available sources between the state owned and private silviculture have been also presented. On the basis of those differences the conclusion can be drawn that the economic system and the settling system based on it cannot be also the same. The development of the settling models at European level, supporting the transparent and efficient management to be used in the individual sectors and their gradual introduction can be one of the tools serving for the formation of our silviculture.

### ***Results – Theses***

1. The forest property conditions evolved in the European Union, the organisational forms established are the result of a long lasting development process.

During the nineties comprehensive changes occurred during a relatively short period of time in Hungary, which make the drawing into the scene such external incentives unavoidable, and the viable organisational forms, which can be acceptable and supportable not only by the European Union, but can promote the introduction and efficient functioning of the supporting, financing and settling methods to be connected with those incentives.

The utilisation of the incentives at the proper level and to the right extent can alleviate among others the disadvantageous effects of the competitive disadvantages arising from the quick and compulsory transformation, as well as it assures the possibility for the active participation in the European co-operative and supporting systems as well.

2. One of the characteristics of the subvention system of the European Union is that it assures important advantages for the organisation having only minimum viability parameters, assuring that the agricultural activity can move on a sustainable course, too. An important part of the property elements to be found in the ownership of the state in Europe helps the accomplishment of the public tasks and serves for them, and consequently both the goals to be achieved and the financing framework shall be determined through the central budget.

In spite of the fact that the state owned forests in Hungary contribute to an important extent to the accomplishment of the public tasks, they cannot utilise to an important extent the subventions of the European Union and of the national supports related to them. An exception to this is the subvention of the forest-plantation and financing, which are considered as supplementary agricultural policy measures of the community. In the case of the private forest owners and farmers the low development and stabilisation of the new organisational forms render the successful participation in the competitions and the access to the available sources more difficult.

For the accomplishment of the tasks determined by the state the sources to be assigned directly to the tasks and which shall be at least appropriate for the accomplishment of the task shall be assured. The providers assuring the accomplishment of the public tasks or the applicants of the subvention shall function within organisational frameworks, which are well known in the European Union, are supportable and correspond basically to the conditions of the stability, the transparency and can be followed up.

3. The accounting systems of the individual countries in the European Union show essential differences after the alignment with the uniform guidelines of the European Union. Those deviations are originated from the differences occurring between the rules of law announced under the framework of the state regulation and the national professional standards, further they

can be found in the balance sheets, operating statements and cash-flow statements used.

It can be stated that similarly to the Member States of the European Union taking the accounting and tax regulation valid in Hungary into consideration, the modelling is only possible for the economic processes to be described in a shorter cycle. This means that similarly to several other countries the special regulation valid for the agriculture in our country is not able to treat the activities of the sustainable and durable silviculture properly, which will last several years or from time to time are operated only periodically. This is particularly true for the measuring and recording processes of the forest property.

4. On the basis of the analysis of the data the profitability of the silviculture is low, and the rhythm of the increase of the income and of the profit cannot reach the level of the other sectors. Within the sector the profitability and efficiency indicators of the companies of the private silviculture are in spite of their declining tendencies better, than those of the state owned associations, but the value of the services offered mainly by the state sector, which correspond to the increasing social expectations, is not present among the financial indicators. For the judgement of the profitability position of the silviculture, for the comparison with other sectors and for the improvement of this position, the special elements characteristic for this sector shall be represented in the settling systems.
5. In the organisational system evolved in the field of the silviculture the invested assets within the aggregate amount of the balance and the own capital on the side of the sources represent a relatively high proportion. This means that the profit proportional to the invested capital and the profitability of the capital are relatively low, though the value of the forests will not be yet stated among the assets.

It is characteristic for the complexity of the silviculture that the development of the earnings and the profitability is fundamentally influenced by the conditions of the target stock in addition to the

invested financial means and to the elements of the own capital. It occurs that owing to the feature of the target stock a loss shall be taken into consideration in advance. In so far as the operation of the financial means and of the capital-elements cannot result in the proportional average profitability, this means that in relation to the given target stock neither the market conditions, nor the prices render possible to achieve a higher income, and at the same time the costs will increase owing to the higher prices of the means acquired from other sectors.

6. Continuing the exemplary estate evaluations based on the yield made by the Institute for the Forest Property Management of the West Hungarian University related to the state owned forests, the development of the changes in the property and of the profitability can become also more confinable. We must consider during the comparison of the data-series that the yields have been calculated from the results, which are influenced to an important extent among others by the hectic change of the inflation rate or the effect exerted on the value of the forest caused by the increase of the firewood.

The undertakings working in the field of the silviculture are charged with important taxes and contributions to be paid, and they cannot use the tax allowances against those, since their financial position is not satisfactory, their liquidity is bad and have only a small source for the development. The position of the efficiently functioning undertakings is rendered more difficult by the Hungarian financing system operated in the field of the silviculture, which makes important inner regrouping not only in the field of the results, but between the farmers and the sectors as well.

In the reports of the forest proprietors and the forest farmers the forest does not figure with a value. The lack of the statement in value comprises the forest or the changes occurring in the forest, though the effective value of the forest will increase or decrease as a consequence of the effective intervention. The possibility of the settling in the book keeping activity can be assured in the case

of the increase of the value with the prescription of the invested financial means and in the case of a decrease with the prescription of the depreciation above the planned level.

Since the value of the forest has not been determined, the statement of assets and liabilities is also burdened with this fault and this would lead to the distortion of the profit and of the operating statement. The result presented in the yearly balance does not show so the result of the management and this fact makes the judgement of the sector or the evaluation of the management, in addition to the individual farmers, the identification of the financing sources and thereby that of the possibilities uncertain.

### *The scope of utilisation of the results*

The results made known in the doctoral dissertation, the presented methods and models serving for the settlement of accounts can be used and exploited both in the field of the state and of the private silviculture.

The deduction of the notion related to the accounting basic principles or tools, which are of overriding importance in the accounting models of the silviculture, but are not determined directly in the rules will contribute to the utilisation corresponding to the content, as well as to the carrying out of a checking and accounting made in a uniform system.

Having used auditing methods for the analysis of the balance data of the silviculture at national and at regional level a reliable and real picture was presented concerning the property and the financial status, as well as the result of the operation of the undertakings, that were active in the field of the silviculture. The quantitative results contribute to the evaluation of the real economic performance, as well as to the harmonisation and further development of the strategies valid for the medium and long range.

The presented models of the forest planting and accounting of the renewal of the forests were presented according to the booking and

accounting prescriptions in force. The individual models adjusted to circumstances of the enterprises acting in the field of the silviculture were introduced in several cases. The proposals formulated in the dissertation have been elaborated using the experiences gathered in the course of the utilisation of the models, as well as taking the comparative analyses made at international level into account.

The surroundings of the management and the developed organisational forms determine the sphere of the accounting and settling systems to be employed to a great extent. After the presentation and analysis of the international and domestic conditions and possibilities a system will be elaborated and presented, which is not ideal, but which can be further developed, which is optimal in the given situation and which can be further developed in accordance with the guidelines.

It is characteristic for the silviculture sector that the various procedures used for the determination of the efficiency of the individual activities, processes and performances restrict the comparability of the enterprises acting in the field of the silviculture sector to a great extent. During the period of several decades of the cultivation phase in the field of the silviculture the losses were revealed first of all, which were not properly shown the activity of the given economic activity, since this period created the returns properly expectable from the sale of the wood-stock. For the accomplishment of the comparative analyses a harmonised accountancy regulation is necessary, which has been tried to create with the introduction of the International Accountancy Standard (IAS) No. 41 in the case of the living organisms. One of the most important rules of the IAS No. 41 is that instead of the consideration of the purchasing value, the consideration of the value on the basis of the market value valid on the day of the accounting day of the balance is prescribed, which renders the statement of the results belonging to the given years or periods possible. In addition to the refashioning of the financing system of the Hungarian silviculture the detailed elaboration of the accounting and evaluating methods based on the market is also required, which can contribute to a great extent to the improvement of the competitiveness and of the

creditworthiness of this sector. The results presented in the doctoral dissertation point to the fact as well that the elaboration of further methods is particularly required in the case of the wood-stock having different features and age at the point of time of the felling of trees for the determination of the expenditures and incomes belonging to the individual periods.

A large number of possibilities is available for the continuation of the research works, as well as for the practical use of the results achieved. The regulation of the silviculture consists of general and special elements, but the characteristic features appear only partly in the accountancy settling system of this sector. In addition to the utilisation of the accounting techniques and models presented in the doctoral dissertation the development and the operation of the subvention and taxation systems harmonised with the guidelines of the European Union, which take the peculiarities of the state owned and privately owned silviculture into consideration, are more and more required.

The use of the suitable settlement systems, properly documented and transparent to be audited can help us to the successful participation in the competitions financed nationally or by the European Union and in the regional co-operations.

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